## microprocessors and microsystems

Index to Volume 7, Number 1-10, Pages 1-504 (1983)

Subject Index		Mayne, A J Linked local area	400	instrument for intravenous	
(N) = News item		networks Mufti, A A Elementary computer	183	delivery of analgesia	251
Aim 65		graphics	338	local and plant-wide processes (N)	148
clock/calendar on Eurocard (N)	46	Simpson, R J and Terrell, T J	330	Merlin-X industrial system (N)	356
controlling paint dispenser (N)	50	Introduction to 6800/6802		microprocessor adaptive	67
Altos	50	microprocessor systems	184	cushioning of cylinders	228
16-bit 586 series microcomputers (N	1) 92	Stabley, D H Assembler language for		of a robot arm using FORTH	239
Analysis	1) 32	application programming	84	Multibus	
in a multichannel system using			04	pottery handling (N)	297
FORTH	223	Steckhaln, A D and Den Otter, J		flexible for robots	121
of film with a microcomputer digitize		Industrial applications for	274	68000 communications (N)	277
system	256	microprocessors	2/4	solenoid-driving chip (N)	354
of particle shape with a	250	Stone, H S Microcomputer	86	STD floppy disc card (N)	35
microprocessor	300	interfacing	00	temperature (N)	246
with microcomputers (general)	419	van Bochmann, G Distributed	407	tester-based system (N)	403
	413	systems design	487	token access in LANs (N)	343
ADA	291	Van Doren, A H Data acquisition		weighing SBC (N)	293
development support (N)		systems	84	with microcomputers (general)	419
development system (N)	41	Young, S J Real time languages -			
Apple II		design and development	85		
spectrum analysis of dynamic	06	British Telecom			
signals (N)	96	purchase of Digital Micro-	244	Data acquisition	
Apple	00	systems (N)	244	DaTORscan (N)	352
Lisa	90	Burr-Brown		Multibus compatible (N)	150
COBOL	91	share issue (N)	195	with microcomputers (general)	419
Architecture		Bus standards		Datalink	
S100-based computer (N)	278	Multibus II (N)	358	digital system for field work	435
		S100 (N)	49	Data logging	
		VMEbus on SASI (N)	455	dual-port memory system	263
BBC Microcomputer		'STE' Eurocard P1000	269	Data protection bill (N)	142
monitoring heart rate (N)	48			Development	
Book reviews				Canadian programme (N)	195
Baldwin, J N W Microprocessors				European market (N)	413
for industry	126	C		Tektronix labs (N)	281
Barnard, D T and Crawford, R G		compiler for 8086/8 (N)	134	VME/68010 system (N)	346
PASCAL programming -		Cambridge Ring		for Fairchild 9445 (N)	129
problems and applications	487	68000-based microcomputer (N)	405	HP 64000	169
Bronzino, J D Computer applications		Commodore		HP 64292S emulator (N)	45
for patient care	274	IEEE and RS232 interfaces (N)	91	Digital Research	
Cannon, D L Understanding electro	nic	multiuser disc drive (N)	147	C compiler (N)	134
control of energy systems	275	protocol converter for Pet (N)	286	CP/M version 3.0 (N)	341
Carr.     Designing microprocessor-		Communications		software for Fujitsu Micro 16S (N)	245
based instrumentation	126	card for Apples (N)	281	TMS320	451
Clements, A Microcomputer design		controllers (N)	277	Digital signal processing (see also specia	1
and construction	184	telex microprocessor (N)	242	issues)	
De Grandis-Harrison, R FORTH on		Company reports		FAD	475
the BBC microcomputer	488	National Semiconductor (N)	194	image processing	482
De Grandis-Harrison, R FORTH		Computer vision		parallelism	46
theory and practice	340	system for robotics education	320	and speech synthesis	469
Goozé, M E The S6800 family	184	Conferences		Distributed networks	-
Heiserman, D L Microprocessor		Automatic Testing '83	232	for coal control (N)	48
instruction sets and software		Control			
principles	182	A/D from Honeywell (N)	149		
Jones, N B (ed.) Digital signal		board-level systems controller (N)	136		
processing	340	clock/controller generator (N)	456	Emulation	
Klingman, E E Microprocessor		disc combining Multibus and		Emulyzer upgrade (N)	132
systems design Volume 2	86	SASI (N)	408	HP 64292S for NSC800 (N)	451
Lim, P A CICS/VS command level	-	felt cutting (N)	293	National Semiconductor 16000 (N)	92
with ANS COBOL examples	188	floppy disc board for \$100 (N)	341	RCA CMOS MicroEmulator (N)	46

68000 development system (N)	136	Intel		single-chip 8-bit microcomputer	
Z8 in real time (N)	238	bubble memory price cut (N)	461	(N)	409
Z80 and 8085 (N)	134	Ethernet serial interface chip (N)	404	68008 (N)	277
EPROM		iAPX286 (N)	455	synchronous address multiplexer (N	
emulation and programming units		iAPX 432 (N)	93	Unix System V on 68000 (N)	289
(N)	404	iRAM (N)	94	VME/68010 development system	
programming device (N)	129	iRMX for 16-bit microcomputers	387	(N)	346
Ethernet	40	iSBX bus links for 8086 SBC (N)	353	Multibus	
APL linking (N)	49	Unix System V on iAPX286 (N)	289	-compatible dRAM board (N)	409
serial interface chip (N)	404	Interfacing		controller (N)	239
VisiOn (N)	290	digitized Disa output to an	314	D/A converter boards (N)	133
Evaluation		Apple II	314	data acquisition (N)	150
methodology to select				floating-point processor for	241
microprocessors for specific	439			68000 (N)	241 408
applications	192			storage expander (N)	408
module for MC68705 (N) Expansion	192	Logica		Multiprocessing on \$100-based computer (N)	278
bus system for Spectrum (N)	349	financial report (N)	53	and OCCAM (N)	41
memory storage board (N)	408	optical fibre version of Polynet		and Occam (N)	41
memory storage board (14)	400	(N)	49		
		Xenix distribution (N)	100		
		Logic analysis		National Semiconductor	
		K105-D (N)	346	CMOS gate array in 2 µm (N)	136
Ferranti		Zicon 701 (N)	352	company report (N)	194
F100-L and I/O on Eurocard (N)	351	LOGO		Genix (N)	345
FORTH	22 1	design of turtle interface	63	industrial microcomputer	343
and applications at the Royal				boards (N)	350
Greenwich Observatory	203			16000 emulator (N)	92
and bit-slice (N)	358			R & D investment (N)	493
(see special issues)	000	Market reports		Unix System V on 16032 (N)	289
discompiler and use in digital filters		CAE (N)	246	NEC	
and multichannel analysis	223	Compuphobia (world) (N)	196	AMI second source (N)	358
for controlling a robot arm	228	Data interface devices on personal		ECL gate arrays (N)	280
6502 macroassembler	213	computers (US) (N)	52	8k × 8-bit ROM (N)	346
FORTRAN		Development systems (Europe) (N)	413	voice synthesis on CMOS (N)	45
compiler for 68000 (N)	407	Disc drives (US) (N)	54	Networks	
		European computer firms (N)	460	NCR LAN (N)	236
		Gate arrays (N)	194	viewdata software for LANs (N)	149
		Home computers (N)	101		
Gate arrays		Household computers (UK) (N)	244		
Raytheon (N)	135	Microcomputers (Europe) (N)	53		
National Semiconductor at 2 µ	136	Micros (UK) (N)	141	OCCAM	
NEC ECL (N)	280	Office systems (UK) (N)	52	multiprocessor language (N)	41
Gould		Retail banking by home computer		Operating systems (see also special issue	es)
oscilloscope for ATE (N)	452	(US) (N)	52	concurrent CP/M-86 and recent	
		Robot installations (N)	140	advances	391
		Semiconductor device assembly		CP/M network (N)	457
		equipment (N)	459	CP/M version 3.0 (N)	341
Hewlett-Packard		Software and small companies (N)	102	Genix (N)	345
education grants (N)	143	Speech recognition systems		MS-DOS upgrade	190
parametric testing of wafers (N)	283	(Europe) (N)	52	porting a microcomputer	
signature analyser (N)	240	Speech synthesis and recognition		operating system	380
test PCBs (N)	348	devices (US) (N)	51	Pick on Crystal 68000 (N)	452
High Integrity Systems	0.0	Wafer processing equipment (US)		16-bit standards and MS-DOS	369
HIS 432 microcomputer (N)	93	(N)	145	16-bit system for multiple tasks	
Hitachi		Mitsubishi		in real time	375
DMA controller for 68000-based	4.4	audio/video single-chip microcomp		UCSD p-System	394
systems (N)	44	(N)	135	Xenix on 16032	492
CMOS single-chip microcomputer	342	second source for 8050 (N)	457	Xenix version 3.0 (N)	456
CMOS speech board Honeywell	278	single-chip microcomputer (N)	280		
	1.40	Monitoring			
A/D industrial controller (N)	149	distributed process alarm system		DACCAL	
		(N)	146	PASCAL	407
		heart rate with BBC Micro (N)	48	compiler for 68000 (N)	407
IDM		microprocessor-based system for	00	development system (N)	41
IBM	100	hearts	29	programming on the 64000	169
software centre in Ireland (N)	102	oil rig pumps (N)	147	standard in UK (N)	413
3D graphics software for PC (N)	137	with microcomputers (general)	419	POLYFORTH	217
Visi On on Ethernet (N)	290	Mostek	120	multichannel analyser	217
IEEE-488 demonstration system for linking		development system (N)	136	Pro-Log	120
microprocessors	173	4-ROM Kanji character set (N) MMX-RAM board (N)	283	STD system (N)	130
			455		
on oscilloscope (N)	347	68901 peripheral chip (N)	95		
Image processing	482	256k dRAM (N)	456	Deports	
with VLSI		VME-DRAM (N)	342	Reports	107
using Commodore 8032	256	Motorola 8-bit CMOS microcomputer (N)	279	UK engineers in short supply (N) World survey of electronic	197
			419	WOLLD SULVEY OF EJECTIONIC	
Inmos					107
multiprocessor language OCCAM	41	evaluation module for 68705 (N)	192	developments (N)	197
multiprocessor language OCCAM (N)	41	evaluation module for 68705 (N) Exorset (N)		developments (N) EPROM quality	197 460
multiprocessor language OCCAM	41 493 242	evaluation module for 68705 (N)	192	developments (N)	

85000			210		
RS232		with HP 3065 (N)	348	motherboards (N)	350
for Commodore 64 and Vic 2	0 91	logic levels in digital ICs (N)	451	16-bit SBC (N)	137
network multiplexer (N)		oscilloscope for ATE (N)	454	Z8001-based SBC (N)	343
	17	parameters of semiconductor		Voice synthesis	
	,	wafers (N)	283	module (N)	129
		selfdiagnosis of faults (N)	54	Voice synthesizer	240
SGS		simulation and diagnosis of			
CMOS agreement with Toshib	oa (N) 53	terminals (N)	406		
controller chip (N)	354	Texas Instruments			
S100		<b>EEPROM</b> and array agreements		Westminster report	
floppy disc controller (N)	341	(N)	139	Government pushes use of micros	
industrial control and process	inter-	single-chip microcomputer 70C20	131	in firms	235
faces	49	Toshiba		UK Govt sees IT82 as successful ste	
multiprocessing computer	278	CMOS agreement with SGS (N)	53	into new era	89
Special issue		8k × 8-bit sRAM (N)	407	UK performance in IT is unimpressi	
FORTH	201-248	R&D exchange (N)	291	says NEDC	181
16-bit operating systems	361-416	read exchange (11)	221	Winchester discs	101
Digital signal processing	449-504			for Intellec development systems (N	1)122
	443-304			for Q-bus and Unibus (N)	
Speech synthesis	284	LICED in System	348		344
Applebus card (N)		UCSD p-System	348	interface standard (N)	357
C <sup>2</sup> MOS	469	Unibus	400		
Standards		interface to HDLC (N)	409		
PASCAL in UK (N)	413	Unix			
STD		for Lisa	90		
calendar-clock (N)	403	on System 8000 (N)	94	Z8001	
floppy disc controller (N)	351	on Z8000 (N)	411	in UK-made terminals (N)	49
Winchester discs (N)	192	System V (N)	289	Zilog	
Systems integration	33			allegation of Z80 patent	
				violation (N)	197
				clock/controller generator (N)	456
		VME		evaluation kit for Z8500	93
Testing		floating-point accelerator (N)	351	Z8 realtime emulator (N)	238
	280	floating-point processor for	331		
and repair for disc drives (N)			241	Z80000 (N)	413
chips in cosmic rays (N)	412	68000 (N)	241		492
Title Index		Government pushes use of micros in		16-bit operating systems	364
		firms (Westminster report)	235	16-bit operating systems standards and	
Adaptive cushioning of cylinders	using	Hardware switch for DMA transfer to		MS-DOS	369
microprocessor-based control		augment CPU efficiency	117	Software-based single-step and multire	
			482	breakpoint facility	81
A demonstration system for link		Image processing with VLSI	404		
microprocessors using the GP		Interfacing digitized Disa anemometer	214	Software development for communica	429
(IEEE 488) (Design note)	173	output to an Apple II computer	314	between two microcomputers	
Advanced C <sup>2</sup> MOS speech synthe		iRMX — a realtime operating system fo		'STE' Eurocard bus, P1000 (Update)	269
Advanced 16-bit operating system		advanced 16-bit microcomputers	387	Systems integration with reliability in	
multiple tasks in real time	375	Methodology for the evaluation and		(Teach-in)	33
A flexible controller for robots	121	selection of microprocessors for		The Portable UCSD p-System	394
A microprocessor-controlled inst	trument	specific applications	439	TMS320 — a step forward in digital sig	nal
for Intravenous Delivery of A	Analgesia	Microprocessor-based device for measur	e-	processing	451
(IDA)	251	ments on a superconducting transm	ission	Transaction language characteristics an	nd
A 6502 macroassembler in FOR	TH 213	line	324	user/computer interfaces in manufa	ac-
CMOS automobile performance		Microprocessor-based heart monitoring		turing systems	3
Computer vision system for appl		Microprocessor-based multichannel ana		Transferring a macro program to a mic	
in robotics education	320	developed using POLYFORTH	217	machine	107
Concurrent CP/M-86 and recent		Microprocessor-controlled driving unit		UK Govt sees IT82 as successful step in	
	391	artificial hearts	306	new era (Westminster report)	89
in operating systems		Microprocessors and Microsystems toda		UK performance in IT is unimpressive	03
Construction of an inexpensive a		41. 4 4	59		181
multiprocessor system	111	Mobile digital detalish for field work	33	says NEDC (Westminster report)	101
Cross-bar switch multiple microp		Mobile digital datalink for field work	425	Use of microcomputers in monitoring	reic
system	75	applications	435	instruments, data acquisition, analy	
Design of a microcomputer-base		Multichannel software event counter fo		and control	419
turtle interface	63	MC6809 (Design note)	444	Using a microprocessor in high perform	
Design of a microprogrammed fl		Polymer chemists find new ways of ma		liquid chromatography	19
processor using superslice An		chips (Update)	272	Using a microprocessor to analyse part	
Dual port memory microprocess	or system	Portable software for connecting remote	e	shape — a tutorial system	300
for data logging	263	microcomputers and a central	-	Using FORTH to control a robot arm	-
FAD - flexibility in digital signa		minicomputer	25	(Design note)	228
processing	475	Porting a new microcomputer operating		VLSI design for massively parallel sign	
Film analysis using a microcomp	outer	system	380	processors	461
digitizing system	256	Programming microprocessors with a hi	gh	Writing a FORTH discompiler and usin	
FORTH and microprocessor app	olications at	level language - the case of		FORTH in digital filters and multi-	
the Royal Greenwich Observ		PASCAL/64000	169	channel analysis	223
			4		
Author Index		Annevelink, J see Kung, S Y	461	Berridge, J C Using a microprocessor in	n
		Arvind, D K see Corry, A G	482	high performance liquid	
		Barron, R Use of microcomputers in		chromatography	19
Abachi, H see Wilkinson, B	75	monitoring instruments, data		Breeze, P Polymer chemists find new v	
Akinola, A A see Barron, R	419	acquisition, analysis and control	419	of making chips (Update)	272

p-System	394	in FORTH	213	Salihi, A Adaptive cushioning of	121
Challener, P FAD - flexibility in				cylinders using microprocessor-	
digital signal processing	475	Kapur, P Microprocessor-based heart	29	based controls	67
Chambers, I R A microprocessor-		monitoring	29	Sands, D Using FORTH to control a	
controlled instrument for		Kornstein, H Concurrent CP/M-86 and		robot arm (Design note)	228
Intravenous Delivery of		recent advances in operating	201	Shaw, R see Hardcastle, J A	314
Analgesia (IDA)	251	systems	391	Shigehara, H see Suzuki, Y	469
Chance, R CMOS automobile		Korya, R R see Corry, A G	482	Shigemi, M see Hardcastle, J A	314
performance logger	163	Kung, S Y VLSI design for massively		Singh, D A demonstration system for	314
Chandrasekhar see Rao, G	153	parallel signal processors	461	linking microprocessors using the	
	469	Lakshminarasaiah see Rao, G	153		173
Chihara, H see Suzuki, Y	407	Lee, S P Software development for		GPIB (IEEE 488) (Design note)	1/3
Choquette, A see Magnenat-Thalmann,	107	communication between two		Smethurst, G Dual port memory	
N C. L. S. and G. annu A. C.	107	microcomputers	429	microprocessor system for data	262
Connolly, G I S see Corry, A G	482	Levi P Transaction language character-	123	logging	263
Corry, A G Image processing with VLSI		istics and user/computer interfaces		Smith, M F Multichannel software even	it
el-Dhaher, A W G see Hassan, T	169	in manufacturing systems	3	counter for the MC6809 (Design	
El-Kateeb, A Hardware switch for DMA			429	note)	444
transfer to augment CPU efficiency	117	Lue, J T see Lee, S P	423	So, J TMS320 — a step forward in digit	
Färber, K Film analysis using a micro-		Magnenat-Thalmann, N Transferring a		signal processing	451
computer digitizing system	256	macro program to a micro machine	107	Sparling, B J Portable software for	
Filbey, G Writing a FORTH discompiler	r	Mutagahya, B H A flexible controller		connecting remote microcomputers	
and using FORTH in digital filters		for robots	121	and a central minicomputer	25
and multichannel analysis	223	Myers, D Porting a new microcomputer		Srinivasan, B Methodology for the	
Fay, D Using a microprocessor to analyst	se	operating system	380	evaluation and selection of	
particle shape - a tutorial system	300	Nessler, N Microprocessor-controlled		microprocessors for specific	
Fraser, D A see Gill, J	81	driving unit for artificial hearts	306	applications	439
Gall, S see Färber, K	256	Nicholson, B 'STE' Eurocard bus,	300	Suzuki, Y Advanced C <sup>2</sup> MOS speech	
Gallacher, J 16-bit operating systems	364	P1000 (Update)	269	synthesizers	469
Gill, J Software-based single-step and					
multiregister breakpoint facility	81	O'Sullivan, C see Twomey, P	435	Takagai, Y see Suzuki, Y	469
Green, D J Microprocessors and Micro-		Parker, I N see Corry, A G	482	Tanaka, F see Suzuki, Y	469
systems today - editorial	59	Parker, N M see van Breda, I G	203	Terrell, M Systems integration with	
Hardcastle, J A Interfacing digitized Dis		Phillips, C 16-bit operating systems		reliability in mind (Teach-in)	33
anemometer output to an Apple	_	standards and MS-DOS	369	Thalmann, D see Magnenat-Thalmann,	
Il computer	314	Rao, G Design of a microprogrammed		N	107
Harper, R Microprocessor-based	314	floating point processor using		Tucker, S iRMX - a realtime operating	
multichannel analyser developed		superslice Am2903	153	system for advanced 16-bit	
using POLYFORTH	217	Reid, D see Barron, R	419	microcomputers	387
Hassan, T Programming microprocessor			413	Twomey, P Mobile digital datalink for	
		Roberts, G Government pushes use of	235	field work applications	435
with a high-level language — the case	169	micros in firms	233	man Banda I C FORTIL and minor	
of PASCAL/64000		Roberts, G UK Govt sees IT82 as	90	van Breda, I G FORTH and micro-	
Hemenway, J Advanced 16-bit operation	g	successful step into new era	89	processor applications at the Royal	202
system handles multiple tasks in	275	Roberts, G UK performance in IT is	101	Greenwich Observatory	203
real time	375	unimpressive says NEDC	181	Weston, R H see Mutagahya, B H	121
Hoffner, Y Construction of an inexpens		Russell, R A Design of a microcompute		Weston, R H see Salihi, A	67
and flexible multiprocessor system	111	based LOGO turtle interface	63	Wilkinson, B Cross-bar switch multiple	
Jamzadeh, F S Microprocessor-based		Russell, R A Computer vision system		microprocessor system	75
device for measurements on a super-		for applications in robotics	000		
conducting transmission line	324	education	320	Yu, H-Y see Lee, S P	429

